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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,153	07/25/2006	Josef Artelsmair	ARTELSMAIR ET AL 8 PCT	4970
25889	7590	04/13/2011	EXAMINER	
COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			DANG, KET D	
			ART UNIT	PAPER NUMBER
			3742	
			MAIL DATE	DELIVERY MODE
			04/13/2011	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/587,153

**Applicant(s)**

ARTELSMAIR ET AL.

**Examiner**

KET D. DANG

**Art Unit**

3742

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 January 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-945)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments, see Arguments/Remarks, filed January 4, 2011, with respect to the rejection(s) of claim(s) 2-6 under 103 (a) have been fully considered and are persuasive in term of a measuring device limitation. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Yamada et al. (US Pub. No. 20030010753 A1).

As directed by the arguments: no claims have been amended, claim 1 has been cancelled and no new claims have been added. Thus, claims 2-6 are presently pending in this application.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukai et al. (US Pub. No. 20040011776 A1) in view of Parmelee et al. (US 4,731,518) and Yamada et al. (US Pub. No. 20030010753 A1).

Regarding claim 6, Mukai et al. discloses a welding wire storage device for a welding system (see figure 1) comprising: a housing 3 (fig. 3A) (see figures 3A below for

the indication of a housing) having a free space, a first end region 5 (fig. 1) and a second end region 6 (fig. 1) opposite the first end region (para. 0050-0051); a welding wire 1 (fig. 1) arcuately arranged to lie freely in the free space of the housing; a guide element on the second end region 6 (fig. 1) (para. 0020); and first 5 (fig. 1) and second 6 (fig. 1) coupling mechanisms arranged on the housing (para. 0020, 0021, 0046-0047).

With respect to claim 3, Mukai et al. discloses wherein elements for delimiting maximum deflection of the welding wire 1 are arranged in the housing 3 (fig. 3A) (para. 0019, 0031).

With respect to claim 4, Mukai et al. discloses wherein an element for fastening 14 (fig. 2) a hose pack 3 (fig. 1) is arranged on an opposite side of the free space of the housing (para. 0031-0032).

With respect to claim 5, Mukai et al. discloses wherein the housing (see fig. 3A below) is arranged between a welding apparatus or wire feeder 2 (fig. 1) and a welding torch 4 (fig. 1), wherein a hose pack 3 (fig. 1) is arranged directly, without interruption, between the welding apparatus or wire feeder and the welding torch, and wherein the wire core is interrupted in the housing 3 (fig. 3A) (para. 0012).

Mukai et al. discloses all of the limitations of the claimed invention as set forth above, except for a wire core and a wire guide hose for the wire core; and a measuring device for detecting deflection of the welding wire.

However, a wire core and a wire guide hose for the wire core are known in the art. Parmelee et al., for example, teaches a wire core 100 (fig. 14, i.e. electrode guide)

and a wire guide hose 200/202 (fig. 14) for the wire core (col.4, lines 50-56; col. 6, lines 27-33). Parmelee et al. further teaches such a configuration provides a means to improved arrangement for insuring that the electrode is electrically energized at a predetermined and consistent distance from the end of the contact tip (col. 3, lines 2-4) and to provide a smooth passage for the movement of electrode E therethrough (col. 5, lines 33-34).

Similarly, a measuring device for detecting deflection of the welding wire is known in the art. Yamada et al., for example, teaches a measuring device 100 (fig. 1, i.e. the optical sensor) for detecting deflection of the welding wire 1 (fig. 1) (abstract; para. 0022 and 0030). Yamada et al. further teaches such a configuration provides a means to detect positional information of a wire electrode in an inserting passage between a feed roller for feeding a wire electrode and an upper wire guide; and a control unit for discriminating a state of vibration or deflection of the wire electrode according to the positional information detected by the optical sensor and also for controlling a feeding and rewinding motion of the feed roller according to a quantity of deflection of the wire electrode (para. 0010).

Therefore, it would have been obvious to one of ordinary skill in the art to modify Mukai et al. with a wire core and a wire guide hose for the wire core of Parmelee et al. in order to improved arrangement for insuring that the electrode is electrically energized at a predetermined and consistent distance from the end of the contact tip and to provide a smooth passage for the movement of electrode E therethrough. Similarly, it would have been obvious to one of ordinary skill in the art to modify Mukai et al. in view

of Parmelee et al. with a measuring device for detecting deflection of the welding wire of Yamada et al. in order to detect positional information of a wire electrode in an inserting passage between a feed roller for feeding a wire electrode and an upper wire guide; and a control unit for discriminating a state of vibration or deflection of the wire electrode according to the positional information detected by the optical sensor and also for controlling a feeding and rewinding motion of the feed roller according to a quantity of deflection of the wire electrode.

Fig. 3A

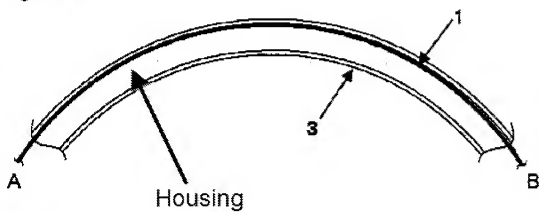


Fig. 3B

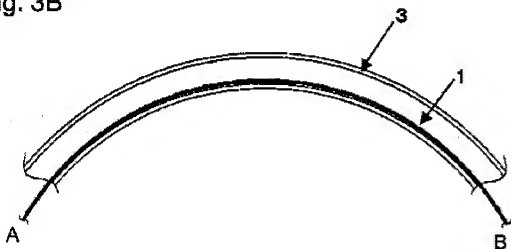
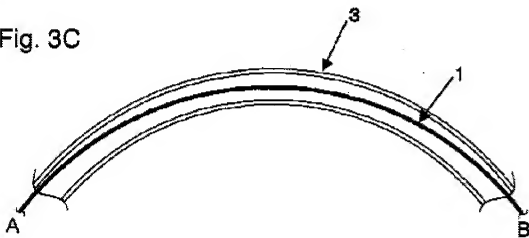


Fig. 3C



2. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mukai et al. (US Pub. No. 20040011776 A1) in view of Parmelee et al. (US 4,731,518), and Yamada et al. (US Pub. No. 20030010753 A1) as applied to claims 3-6 above, and further in view of Benfield (US 3594534).

Regarding claim 2, Mukai et al. in view of Parmelee and Yamada et al. disclose all of the limitations of the claimed invention as set forth above, except for a quick-lock.

However, a quick-lock is known in the art. Benfield, for example, teaches a quick-lock 51 (fig. 2) (col. 2, lines 43-65, i.e. the locking mechanism (51) is designed to adapt and coupling with the lower portion (52) so that the welding wire may extended). Benfield further teaches such a configuration provides a means to secure to join piece parts and reliable attaching to welding unit and quickly removed when not in use (col. 1, lines 40-50). It would have been obvious to one of ordinary skill in the art to modify Mukai et al. in view of Parmelee et al., and Yamada et al. with a quick-lock of Benfield in order to secure to join piece parts and reliable attaching to welding unit and quickly removed when not in use.

#### ***Prior Art***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Rigdon et al. (US 6,066,833) teaches a wire buffer 507a (fig. 27).



***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KET D. DANG whose telephone number is (571) 270-7827. The examiner can normally be reached on Monday - Friday, 7:30 - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoang Tu can be reached on (571) 272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KET D DANG/  
Examiner, Art Unit 3742  
April 7, 2011

/Stephen J Ralis/  
Primary Examiner, Art Unit 3742